



newsletter

Ltd.

The management Newsletter for all industries involved with bar-code scanning and related technologies.

SCANNING, CODING & AUTOMATION NEWSLETTER • 11 Middle Neck Road • Great Neck, N.Y. 11021 • (516) 487-6370

Volume XIV Number 8

April 1991

After dipping its toe in the water....

....for the past nine years, the single largest civilian employer in the United States -- the US Postal Service -- has now plunged totally into the sea of an enormous bar coding program. And the ripples are being felt throughout the auto ID industry.

[The USPS target is to have all letters and packages bar coded by 1995. The total program involves a number of different systems and symbologies. (The current proposal for Package Bar Code Sorting Systems is discussed in a separate article below.)

The size of the Post Office commitment to systems built around bar code scanning boggles the mind. From 1982 through 1990, the USPS spent \$1.5 billion. Commitments for 1991 through 1995 are projected to total a staggering \$4.5 billion, including \$1.2 billion in 1992 and \$1.1 billion in 1993. According to the USPS, the organization has reduced its staffing by 35,000 as a result of these automation efforts.]

As an example of the scope of the program, ElectroCom Automation (Arlington, TX) was recently awarded a \$95 million contract for the production and deployment of hardware for the "video image processing" portion of the Remote Bar Code System (RBCS) to automate the sorting of letter mail. According to a report in the March 22, 1991 issue of *Postal Watch Newsletter* (Overland Park, KS):

"Video imaging technology 'lifts' address information from envelopes that cannot be 'read' during automated sorting (such as letters bearing handwritten addresses or faintly printed letters) and transmits it electronically to an image processing component system for processing at a remote site. At the remote site, address information is displayed on video terminals, where operators key a portion of the address into a computer. The computer then determines the appropriate ZIP+4 code and transmits the information back to the mail processing operation area, where a bar code is applied to the face of the envelope. As a result, letters that were originally unreadable on automation equipment, are processed on the high speed bar code sorters."

The RBCS is designed to read the 20% of the mail that is unreadable on the high speed bar code sorters. ElectroCom is expected to deliver 25 of these systems over a 12-month period starting in February, 1992.



ISSN 0273-3080

INCLUDING THE INTERNATIONAL EDITION

Because the USPS will be offering discounts to those mailers who encode the ZIP+4 into the special Postnet bar code, the newest catchword among the large mailers is "pre-bar coding."

[Postnet is the old half bar/full bar symbology the USPS adopted many years ago and which continues to be the USPS symbol of choice for letter mail and "flats" (large envelopes, magazines, etc.). Many auto ID experts believe that Postnet is an inefficient, difficult to read symbol, and that bar coding technology has moved well beyond it. The USPS is staying with Postnet, however, because of the many older mechanical-type printers in use today which cannot meet the more rigid requirements for printing I 2/5, 39 and other newer symbologies.]

With the multi-billion dollar programs underway by the USPS and United Parcel Service (SCAN Dec 90) -- plus the hundreds of millions being spent by overnight couriers, over-the-road truckers and airlines -- the mail and package handling industry is making one of the largest commitments to bar coding of any group in the world.

In an exclusive interview, President Al Wurz of Accu-Sort -- a leading producer of fixed-position, high-speed laser scanners, with heavy involvement in these applications -- told SCAN: "I think that the trucking industry is in for a revolution with bar coding. They are having difficulty with EDI -- and they won't implement that system for some time to come. In the meantime, there are going to be big auto ID contracts issued for trucking/transportation."

Although the US is ahead in the development of systems for these applications, and although the large scanners used in these installations are manufactured in this country, Wurz believes that the technology is being adopted in other countries at an even faster rate than by the Americans. "The Japanese and Europeans see what can be done with it," Wurz observes, "and they jump in with both feet." Because Wurz does not anticipate that American transportation companies will take full advantage of auto ID, he predicts that there will be almost 100% scanning in Japan and parts of Europe before there is even 50% bar coding in the US transportation industry.

A crescendo of sound and fury....

....has been generated by one of the major auto ID procurements currently out for bid by the United States Postal Service. The project -- called Package Bar Code Sorting System -- involves automating the handling of Parcel Post packages at 21 bulk mail centers. The Request for Proposal (RFP) calls for fulfillment to be completed about two years after the award is made.

The resulting contract, which includes printer/applicators, omni-directional laser scanners, and software for the operating management system, is expected to total between \$45 and \$60 million. The scanners alone are estimated to comprise 30 to 40% of the total award.

Two of the bidders on the prime contract (acting as system consolidators) are expected to be ElectroCom Automation (Arlington, TX -- reported to have already received up to \$1 billion in USPS automation awards), and Westinghouse Electronic Systems (Baltimore, MD). After the award is made, the prime contractor -- responsible for the ultimate system installation -- will obtain the scanners, printers and applicators from among those vendors who can meet

the specifications laid down by the USPS.

The major contenders for the fixed position, omni-directional laser scanners are Accu-Sort (Telford, PA) and LazerData (Orlando, FL), with BRT (Fountainville, PA) standing in the wings. The printer/applicator suppliers who have expressed interest are Sato (Japan-based manufacturer of printers) and Imtec (the Bellow Falls, VT producer of integrated label printer/applicators).

The brouhaha occurred when the bid solicitation (RFP 104230-91-A-0026) specified, presumably based on USPS performance testing, that only Accu-Sort scanners and Sato printers were acceptable. This requirement prompted LazerData and Imtec to crank up their outside legal counsel (they chose to use the same firm) to protest what they perceive as "procurement violations by the USPS, which inhibited competitive bids."

There are allegations of favoritism and bias (and even worse) being leveled against the USPS concerning both the performance specifications and the procedures that were employed in testing the equipment.

In 1986, the USPS had solicited bids for a development contract for omni-directional scanners that could scan a 16-digit interleaved 2/5 bar code with a 20 mil "X" dimension. Accu-Sort and LazerData responded and were each awarded a contract to deliver one experimental unit. (BRT was invited to bid, but did not respond.) When delivered to the Greensboro, NC bulk mail center, both units operated satisfactorily.

Closely watching this development was the Mailers Technical Advisory Committee (MTAC), a group of major commercial mailers including such companies as Sears, L.L. Bean, book clubs and other high volume users of the USPS Parcel Post services. The MTAC wanted a smaller bar code that would reduce their label costs, and strongly requested a 10 mil narrow bar and an "undersquare" symbol with an approximately .4 aspect ratio.

According to project leader Ross Snider, of the USPS Engineering Center in Merrifield, VA: "The MTAC represents our very important customers who have been a driving force in our program to automate." Based on the MTAC recommendations, the USPS attempted to use the prototype scanners at Greensboro to meet these new performance requirements for a smaller label. Both the Accu-Sort and LazerData units failed. "We were forced to compromise," relates Snider, "and we arrived at a new set of specifications calling for a 15 mil narrow bar and a 3/4" x 2 1/2" symbol."

According to Snider, the outcome was very clear: When subjected to extensive tests at the USPS bulk mail facility in Greensboro, NC, Accu-Sort's scanner met the USPS performance requirements; LazerData's equipment did not. The USPS then wrote the ultimate RFP around the Accu-Sort design and performance, actually specifying that only Accu-Sort scanners would be acceptable.

LazerData cried "foul." Dick Wheeler, VP LazerData told SCAN that their equipment performed as well as Accu-Sort's, and he charges that the USPS actually revised the performance specifications after the tests in order to match Accu-Sort's capabilities. Wheeler maintains: "Although the USPS advised Accu-Sort of that change, LazerData was never informed." USPS' Snider admits that the notification of the revised specification was done verbally, but absolutely insists that both companies were fully informed.

Not surprisingly, in an interview with SCAN, Accu-Sort's President, Al Wurz, sees the issues somewhat differently. "LazerData and Accu-Sort got development contracts," Wurz explains. "Tests were run at the Greensboro facility by an independent post office testing group. Both Accu-Sort and LazerData had equal chances to read the 16-digit interleaved 2/5 bar code. Both companies were allowed to witness the tests, but couldn't interfere. Based on those tests, Accu-Sort was specified as the sole supplier of the scanners. I can't blame LazerData for protesting -- but they had the same chance that we had."

The legal move by LazerData seemed to have paid off, at least for their initial objective. On March 6, just prior to the date for the final submission of bids, the USPS amended the request for proposals. First, the proposal due date was moved back to May 24. More significantly for LazerData, the designation of Accu-Sort as the sole supplier was replaced with a stipulation allowing for "Brand Name or Equal Products" to be submitted, with detailed testing procedures to establish equal performance. Based on these revisions, LazerData has withdrawn its protest.

In response to this development, Bob Curry, Accu-Sort's specialist on the USPS procurement, told SCAN: "Accu-Sort has had 12 months of 'live' tests scanning 3 1/2 million packages, and we still think the USPS is hanging tough on their preference for our equipment." LazerData's Wheeler says: "We've already invested over \$1 million in this USPS program and we expect to be successful."

COMMENT

All of this maneuvering is not especially unusual in Government procurements. The so-called sole-sourcing of products always raises the hackles of those who think they are frozen out. And Washington, D.C. is overrun with attorneys who specialize in this kind of effort.

What seems to have raised the temperature of the participants even more than usual, however, were allegations leveled against the USPS of "arrogance," "disrespect for the auto ID industry," and giving "the entire technology a black eye." All of these statements were printed in a highly-charged and emotional story in the February issue of Inside Auto ID newsletter. The report clearly sided with the "outs" -- LazerData, BRT and Imtec -- and lambasted the USPS for its tactics.

In the newsletter's March issue that followed, the exchange of accusations became personal and vindictive when it was revealed that the publisher of Inside Auto ID had joined BRT as Executive Vice President (including an equity interest in the corporation), and that some of the facts published in February, particularly those which were critical of the performance of Accu-Sort equipment, were inaccurate.

The stakes are obviously enormous. The estimated dollar value of the contract for the scanners alone equals about half the total annual sales of Accu-Sort, and is greater than the yearly business of LazerData.

At this juncture in the procurement process, no one knows which prime contractor will receive the final USPS award -- and, subsequently, which companies will be selected to provide the key components. With the issuance of the new amendments, however, the consensus is that the playing field has been leveled for the scanners. (Imtec's legal action with regard to the printer/applicators is still pending and unresolved.)

With the settlement of the suit....

....with Photographic Sciences (Webster, NY), one more notch was added to Symbol Technologies' patented laser gun (SCAN June 90; July 90, Sept 90). On March 6, Symbol and PSC announced that they had "settled the outstanding patent litigation....and have entered into a definitive cross-licensing agreement under applicable patents of PSC and Symbol."

The two companies had sued each other for infringement of their respective patents on hand-held laser scanners. The agreement calls for Symbol to receive royalty payments commencing in 1993 "on a sliding scale up to 15% over time, depending on the volume of PSC's sales of licensed hand-held laser scanner products." No royalty is payable by Symbol, however, for its sales of PSC licensed products.

Although it sounds like a fairly one-sided settlement in Symbol's favor, further analysis suggests that there are a few major items of importance to PSC as well:

1. The patent suit is no longer hanging over PSC, interfering with their marketing and product development efforts.
2. Although PSC will not receive any royalty payments, the agreement does recognize and give credibility to their patents.
3. Royalty payments to Symbol do not start until 1993, giving PSC a few extra years to strengthen their company and enable them to better handle these future obligations.
4. Neither party will disclose the exact terms. The clause, however, which specifies the sliding scale ("up to 15% over time, depending on the volume of PSC sales"), suggests that the licensing fee will probably not reach the maximum amount until PSC achieves a level of sales considerably more than their current activity.

As for Symbol, the company has successfully challenged Opticon, Metrologic and NCR, forcing them to withdraw their hand-held, trigger-activated laser scanners from the market. This agreement with PSC further strengthens their patent position, eliminating the last competitive manufacturer of laser guns that has not signed up as a licensee. [The pending suit with Spectra Physics -- Symbol's oldest licensee -- has implications relating to issues other than the product and its patents (SCAN Oct 90; Nov 90).]

In other, unrelated corporate moves....

....Symbol Technologies has completed two new significant agreements:

A new contract grants LXE (Norcross, GA) a license, under Symbol's patents, to manufacture and sell a one-piece, integrated laser scanning terminal for reading bar code symbols and collecting the encoded data. The agreement, which calls for Symbol to receive a royalty of 7.5% of LXE's sales of the equipment is similar to previous licenses granted by Symbol on laser scanning terminals.

[LXE's extreme unhappiness with Symbol's tactics in marketing their spread spectrum RF system (SCAN Jan 91) apparently did not interfere with the two companies getting together to complete this deal, which will be in the best interests of both. Which is as it should be!]

The second undertaking, which could have longer range implications for Symbol, is a joint venture with Olympus Optical Company of Tokyo, whose major products include cameras, video camera recorders, microscopes, endoscopes and clinical analyzers. Olympus employs 9,200 people in 10 domestic and 8 overseas organizations with net sales in excess of \$1.5 billion.

The joint venture company, named Kabushiki Kaisha Olympus Symbol (OS) will be headquartered in Tokyo and will be licensed by Symbol to sell and support bar code data capture products in Asia. Initially, these products will be manufactured and supplied to OS by Symbol (from its US facilities), but once Symbol transfers its know-how to its Japanese partner, Olympus will design and manufacture them in Japan.

The OS financing arrangement is also interesting and significant: Olympus will own 750 shares of common stock. Symbol Technologies will own one share of common stock and 150 shares of preferred stock; the preferred shares can be converted later into 750 shares of common stock. After conversion, therefore, Symbol (with 751 shares) will own approximately 50.1% of the new company. Over and above any income derived from its ownership of OS, Symbol will receive a royalty fee equal to 10% of the sales revenue from OS products made by Olympus. The rate drops to 7.5% after 5 years, and payments continue for an additional 20 years.

The agreement culminates more than a year of effort by Symbol to find a strong and well-respected partner in the Japanese market. Hand-held scanning in Japan is now dominated by CCD devices; laser guns have barely made a dent (exactly the reverse of the US market). Symbol's move into Japan follows the stunning success that the company has had during the past two years in establishing the strength of its patents. Of particular significance was its unequivocal defeat of Opticon, forcing that Japanese-owned company to pull its hand-held laser scanning products off the market.

Symbol's President, Ray Martino, was quick to caution: "While we do not expect the joint venture to make a material contribution to Symbol's net income in the early years, we should derive material long-term benefits from our relationship with Olympus." These benefits will depend, in part, on how well this new consortium can lure the Japanese retailers and manufacturers away from CCDs and toward laser guns.

A brief comment....

....about the ID Expo Conference, scheduled for May 14-16 in Chicago.

We commend the show's sponsors, *ID System Magazine*, for their selection of the two speakers who will share the keynote platform at 9:00 a.m. on opening day. They chose David Collins (Data Capture Institute) and Harold Juckett (Uniform Code Council) to kick off the conference.

We are taking specific note of this event for two reasons:

1. It is gratifying to see that attendees will be able to hear from knowledgeable individuals from within the auto ID industry who should have significant things to say about the technology. Last November in Atlanta, many people were particularly upset with the SCAN-TECH 90 keynoter, Caspar Weinberger, when he rose to fill an hour or so with an assortment of platitudes about world affairs.
2. The inclusion of Juckett on the ID Expo program recognizes the important and continuing role of the UCC in the growth of automatic identification. The UCC's mission today goes beyond point-of-sale scanning to include a broad range of applications which are spilling over from retailing into other industrial areas.

ID Expo will also feature the "Smart Card Showcase" in a special area in the exhibit hall. Participating companies in the display of this growing technology will be Gem Plus (Rockville, MD), Toshiba (Irvine, CA), Micro Card (Dallas, TX) and Amphenol (Hamden, CT).

ID Expo, 7 Cambridge Drive, Trumbull, CT 06611; 203/374-1411; FAX 203/374-9667.

A direct approach....

....to tracking the growth of EDI (Electronic Data Interchange) is to measure the increase in the number of companies that have installed EDI capability.

One statistical survey, published by the Dallas-based organization that goes under the descriptive name "EDI, spread the word!" provides a comprehensive demographic analysis of the EDI community in the US. (This same publisher also compiles the *EDI Yellow Pages International*, a directory of companies with EDI installations which was the database from which this new analysis was derived.)

Here is a sampling of the statistics as of September 1990:

- There were 12,690 US companies using EDI. This compares with 8,800 in January 1990 and 6,500 in June 1989.
- For the first time, a breakdown is available by region and demographics. For example, there were 4,099 (32%) in the Midwest; 4,001 (32%) in the South; 2,950 (23%) in the Northeast; and 1,630 (13%) in the West.

The study further details information by U.S. Census region, Regional Bell Holding Company, state and Metropolitan Statistical Area. Industry information is by industry group and SIC code. Finally, EDI user data are correlated to such U.S. Census information as revenue, gross product, inventories, value of shipments, and retail sales.

Included with the 200 page, hardbound, 8 1/2 x 11 report, is a summary analysis, an IBM PC compatible diskette containing the raw user data, and a question and answer telephone conference. The cost is \$1,995.

EDI, spread the word!, Box 811766, Dallas, TX 75381; 214/243-3456.

Three upcoming events....

....that you may find of interest:

- The Health Industry Communication Conference will be held in Washington, D.C. on June 19-21. About 30 exhibitors will be demonstrating their wares and seminar programs will be presented on two tracks: EDI and bar coding -- with simultaneous sessions on each subject area. HIBCC, 602/381-1091.
- The second Auto-ID Asia will be held in Singapore October 10-12. Sponsored by the Singapore Article Numbering Council (EAN), the organizers expect a full range of exhibits from companies based in Japan, Malaysia, UK, US and Taiwan. Last year's show attracted visitors from 34 countries.

Business and Industrial Trade Fairs, Ltd., Singapore phone 278-3900; FAX 271-8108. [An affiliate of this same group is organizing the SCAN-TECH Hong Kong convention scheduled for May 9-11.]

- The EDI Group will conduct seminars on Advanced EDI Strategies on June 19-21 in Toronto and October 16-18 in Chicago. According to Daniel Ferguson, President of the EDI Group: "This intensive 3-day course, sponsored by AT&T, IBM of Canada, Royal Bank of Canada and UNISYS, is designed for EDI Project Managers and Senior Business Executives." [The EDI Group has just published its Spring 1991 issue of the widely respected professional journal, *EDI Forum* (SCAN May 90). EDI Group, 708/848-0135.

The partnership may have dissolved....

....but the consulting firm of AZ Inc. lives on. Ed Andersson and Dave ("Zap") Czaplicki formed the agency last Fall as a consultancy to the vendors in the automatic identification industry (SCAN Oct 90).

Last month, Andersson announced that he had accepted a position as Executive VP of BRT (Fountainville, PA), a manufacturer of fixed position laser scanners. (BRT is named for founder Benny R. Tafoya, who founded the company in 1982 after leaving Accu-Sort.) The position was offered to Andersson after AZ Inc. had completed a corporate study for BRT. Andersson will acquire an equity position in the company and expects to move from his present West Coast office to BRT's headquarters. He announced that he will continue to publish his newsletter, *Inside Auto ID*.

Czaplicki, meanwhile, will continue to offer the consulting services of AZ. He expects to utilize his experience in the international market to help companies that want to introduce products into the United States. In addition, Zap described a unique special service, which he expects to announce in a few months, which will be designed to aid the manufacturers, resellers and users of auto ID systems.

AZ Inc., 206/337-1109.

SCAN NEWSLETTER LTD. • 11 Middle Neck Road, Great Neck, N.Y. 11021 • Phone: 516/487-6370 • FAX: 516/487-6449
PUBLISHER/EDITOR: George Goldberg • ASSOCIATE EDITOR: Jeff Goldberg • CIRCULATION DIRECTOR: Teddy Allen

INTERNATIONAL EDITOR: Paul Chartier • United Kingdom Office P.O. Box 7 • Cirencester GL7-1HY England
Phone: 44-285-3011 • Telex: 437269 SHARET G • FAX: 44-285-68859
